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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,796	03/08/2004	Tzvi Avnery	2251.2005-004	3169
21005	7590	01/13/2006	EXAMINER	
HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133				FERNANDEZ, KALIMAH
ART UNIT		PAPER NUMBER		
		2881		

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/796,796	AVNERY, TZVI
	<b>Examiner</b>	<b>Art Unit</b>
	Kalimah Fernandez	2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_\_.  
 2a) This action is FINAL.                  2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-8, 10-20 and 22-25 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-8, 10-20 and 22-25 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date: _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

### ***Terminal Disclaimer***

1. The terminal disclaimer filed on 9-23-05 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 6,702,984 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the

prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-2,8,10-14, 20, and 22-25 are rejected under 35 U.S.C. 102(e) as being anticipated by US Pat No 6,188,075 issued to Takayama et al.
3. Takayama et al disclose an electron beam generator (20).
4. Takayama et al disclose a robotic device (23).
5. Takayama et al disclose a propulsion system (see col.8, lines 5-23).
6. Takayama et al disclose the robotic device capable of controllably spacing the exit window of the electron beam generator a desired distance away from the surfaces as the electron beam generator is moved over the surfaces (see fig.6).
7. As per claim 2, Takayama et al disclose the robotic arm (23).
8. As per claim 8, Takayama et al disclose the robotic device moves along a track (see fig.6).
9. As per claims 10 and 22, Takayama et al disclose the robotic device is capable of continuously and actively spacing the exit window of the

electron beam generator the desired distance away from the surfaces (see fig. 6).

10. As per claims 11 and 23, Takayama et al disclose the electron beam generator is hermetically sealed (see col.4, lines 62-64).

11. As per claims 12 and 24, Takayama et al disclose irradiating the surfaces includes curing (see col.1, lines 14-23).

12. As per claims 13 and 25, Takayama et al disclose the method step: 1) generating a beam of electrons with an electron beam generator (20); 2) moving the beam of electrons over the surfaces with a robotic device to irradiate selected regions of the surfaces, the robotic device including a propulsion system (see col.8, lines 16-18); and 3) controllably spacing the exit window of the electron beam generator a desired distance away from the surfaces as the electron beam generator is moved over the surfaces (see fig. 6).

13. As per claim 14, Takayama et al disclose maneuvering the beam of electrons over the surfaces with a robotic arm (22) (see col.8, lines 16-18).

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 3-7 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. No 6,188,075 issued to Takayama et al and in view of US Pat 5,155,423 issued to Karlen et al.

16. Takayama et al disclose the claimed invention except for a horizontal rotary joint; rotary shoulder joint; a lower arm member; a bracket; and rotary bracket.

17. However, Karlen et al disclose a robotic arm having a horizontal rotary joint; rotary shoulder joint; a lower arm member; a bracket; and rotary bracket (see col.7, lines 42-67; col.8, lines 1-30; see fig. 1).

18. It would have been obvious to an ordinary artisan at the time of the invention to combine Takayama et al and Karlen et al, because Karlen et al teach increased agility (see col. 7, lines 20-28).

19. As per claims 15-17, Takayama et al does not explicitly teach swinging the robotic arm and raising/lowering the lower. However, the obvious combination of Takayama et al and Karlen et al obviously suggest these limitations in fig. 1 of Karlen et al and fig. 6 of Takayama et al.

***Conclusion***

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Pat No. 4,547,119 issued to Chance et al are relevant to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kalimah Fernandez whose telephone number is 571-272-2470. The examiner can normally be reached on Mon-Tues 6:30-3:30; Wed-Thurs 8-5 and Fri.9am-6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on 571-272-2477. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kf

*Nikita Wells*  
**NIKITA WELLS**  
**PRIMARY EXAMINER**      *01/09/06*